

Notice of Allowability

Application No.

09/828,052

Examiner

Haresh Patel

Applicant(s)

SRIKANTAN ET AL.

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/26/2005.
2. ☒ The allowed claim(s) is/are 24-36.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 5/5/2005
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 12/20/2005.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

1. Claims 24-36 are presented for examination. Claims 1-23 are cancelled.
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
3. Authorization for this examiner's amendment was given in a telephone interview with Mr. Daniel E. Vaughan on December 20, 2005.

Amendments to the Specification

4. Line 5 of page 1, please add the following:

RELATED APPLICATIONS: This application claims the benefit of U.S.
Provisional Application No. 60/195,756, filed April 8, 2000.
5. Line 4 of page 4, please add, "and Fig. 5", after "Fig. 3".

Amendments to the Claims

6. Please cancel claims 1, 2 and 4-14.
7. Please amend claims 24 and 31 as below:

Claim 24 (Currently Amended): A media streaming server configured to stream media to multiple clients, the media streaming server comprising:

a set of server sockets, including:

Art Unit: 2154

for each of the multiple clients, a separate control socket configured to receive media stream command events from the respective client;

a single delivery socket configured to stream the media to all the multiple clients simultaneously; and

a single quality control socket configured to receive media quality information events from all the multiple clients;

a poller module configured to:

poll one or more sockets in the set of sockets; and

when an event is received at a the polled socket, pass the event to a consumer object configured to handle the event;

a set of consumer object classes derived from a single abstract base class of consumer objects, wherein the set of consumer object classes includes:

a listener object class configured to listen for connection requests from new clients;

a connection object class configured to handle command events received at polled sockets coupled to the multiple clients; and

a receiver object class configured to process data received at a polled socket; and

a set of task objects derived from a single abstract base class of task objects, wherein the set of task objects includes:

a command task object configured to execute a command received as part of a command event; and

Art Unit: 2154

a receive data task object configured to read data received at the media streaming server.

Claim 31 (Currently Amended): A method of handling an event received at a media server from one of multiple clients receiving streamed media from the media server, the method comprising:

(a) polling server sockets of the media server identified in one or more polltables, wherein one or more processor threads are dedicated to each said polltable for polling sockets identified in the polltable;

(b) executing a first listener object configured to listen at a listener socket for connections from the clients;

(c) adding the listener socket to one of the polltables;

(d) in response to receipt of a first client connection at the listener socket:

(1) waking a processor thread dedicated to the polltable that includes the listener socket;

(2) identifying the first listener object as the object responsible for handling events received at the listener socket; and

(3) creating a first control socket dedicated to receiving control commands from the first client connection;

(e) executing a first connection object configured to accept control commands from client connections;

(f) adding the first control socket to one of the polltables;

(g) in response to receipt of a control command at the first control socket:

Art Unit: 2154

- (1) waking a processor thread dedicated to the polltable that includes the first control socket;
- (2) identifying the first connection object as the object responsible for handling events received at the first control socket;
- (3) creating a first control task object configured to handle the control command; and
- (4) executing the first control task object;
- (h) streaming the media to the multiple clients simultaneously through a single media delivery socket, and
- (i) receiving streaming quality information from the multiple clients at a single quality control socket.

Allowable Subject Matter

8. Claims 24-36 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2154

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hareesh Patel

December 20, 2005


JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100